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U.S. Army Environmental Center

Community Environmental Response Facilitation Act Letter Report

Military Ocean Terminal, Bayonne
Bayonne, New Jersey

February 1996
Contract No. DACA31-94-D-0062
Delivery Order No. 0001
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Prepared for:
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Preface

The United States Army Environmental Center (USAEC), under Contract No. DACA31-94-D-0062, Delivery Order No. 0001, tasked Ecology and Environment, Inc. to prepare this Comprehensive Environmental Response Facilitation Act Letter Report for the Military Ocean Terminal, Bayonne (MOTBY). This report relies solely on information generated for the draft Environmental Baseline Survey (EBS) report, which was also prepared by E & E and issued as part of Delivery Order No. 0001. This draft letter report and the EBS report are being released simultaneously, and the reader is strongly encouraged to review the draft EBS report for the content, sources, and qualifications of the data used to produce the results presented in this report.

1 Introduction

In October 1992, the President Bush signed into law, the Community Environmental Response Facilitation Act (CERFA), Public Law 102-426. CERFA amended Section 120(h) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), establishing new requirements with respect to contamination assessment, cleanup, and regulatory agency notification/concurrence for closing federal facilities and transferring property.

In March 1995, the Base Realignment and Closure (BRAC) Commission submitted its recommendation to close the Military Ocean Terminal, Bayonne (MOTBY), located in Bayonne, New Jersey. Under CERFA, the Department of the Army is required to "expeditiously identify real property that offers the greatest opportunity for reuse and redevelopment" at closing facilities such as MOTBY. The first step in identifying such property is determining the location of real property where no CERCLA-regulated hazardous substances or petroleum or their derivatives were stored for one year or more, known to have been released, or disposed of. This letter report provides the preliminary findings for classifying parcels at MOTBY that may become eligible for transfer.

2 History

In 1939, the City of Bayonne completed a port terminal constructed from reclaimed land in New York Bay. The approximately 700 acre port terminal included both land and surrounding water for ship berthing. The peninsula is "made land" consisting of fill materials dredged from the bottom of New York harbor. The peninsula was constructed in an area already heavily industrialized, particularly with the presence of petrochemical storage and refining facilities that had been operating since the mid- to late 1800s. As originally designed, the land portion of the Bayonne Port Terminal was shaped like a spatula, with a narrow road and rail causeway extending out from the mainland into New York Bay for approximately 1 mile where it connected to a rectangular shaped berthing and transshipment area approximately 1 mile long and approximately 1/3 mile wide. The Bayonne Port Terminal contained one warehouse and equipment for loading and offloading ships. In 1941, the United States Government purchased the Bayonne Port Terminal to secure additional berthing facilities in the New York harbor area for the Department of the Navy. During its tenancy, the Navy expanded the land portion of the facility filling out the area along the causeway to the peninsula's current rectangular shape. The Navy also constructed numerous additional warehouses and support buildings, and expanded the infrastructure of the facility.

On July 1, 1967, the facility was transferred to the United States Army, which has used the facility ever since as a supply depot to ship equipment and materials for operations along the eastern coast of the United States and to support the European, African, Mediterranean, and South American theaters of operations.

3 Regulatory Requirements

CERFA requires the federal government, before termination of federal activities, to determine the environmental condition of real property being considered for transfer. Once the condition has been determined, property transfer can proceed on properties if they have no residual environmental concerns that are either uncharacterized or require remedial or removal activities. Property with no history of storage, release, or disposal of hazardous substances or petroleum products, or migration of contamination from adjacent areas can be identified as "CERFA Uncontaminated Property", and is not subject to the notifications contained in CERFA. Properties where storage, release, or disposal of hazardous substances or petroleum products has occurred (see further delineation below), but where all required remedial actions have been conducted, can also be transferred but are subject to the notification provisions contained in CERFA.

Although CERFA does not mandate the Army transfer real property so identified, it is the first step in satisfying the objective of identification of real property where no hazardous substances or petroleum products were stored, released, or disposed of. This property can be sold or transferred with no additional action. In addition, the CERFA categorization process can assist federal agencies in identifying the further investigation and remedial work necessary to allow the potential transfer of real property where environmental concerns have been identified.

CERFA categorizes real property with regard to the environmental conditions relevant to a particular parcel of land. Categories are determined by the presence or absence of storage, release, or disposal of hazardous substances or petroleum products, and the potential for migration of contamination from adjacent areas. Further delineations are made concerning the level of information, the concentrations of released substances, the amount and duration of storage of hazardous substances or petroleum products, and the status of remedial or removal activities.

4 Environmental Baseline Survey

To acquire the information needed to determine the environmental condition of the property under CERFA, the United States Army Environmental Center (USAEC) tasked Ecology and Environment, Inc. (E & E) to conduct an Environmental Baseline Survey (EBS) of MOTBY under Contract No. DACA31-94-D-0062, Delivery Order No. 0001. The purpose of the EBS is to determine the presence or likely presence of any hazardous substance or any petroleum product or its derivatives on the real property. Data collection for the EBS included a detailed search of archives and records comprising more than 12,000 pages of text, reviews of title documents, evaluation of aerial photographs and historical maps, site visits, evaluation of adjacent properties, and interviews with installation personnel. Since the EBS covers the entire MOTBY facility, it became necessary to subdivide the facility into manageable reporting units. This effort resulted in 82 individual study areas that collectively comprise MOTBY.

5 Categorization Methodology

DOD guidance regarding CERFA categorization for the BRAC process has previously included petroleum products as an item of concern equivalent to other CERCLA defined hazardous substances. In the fall of 1995, DOD made modifications to the CERFA categorization guidance for use in the preparation of BRAC EBSs. These modifications remove petroleum products from consideration as a hazardous material for the purposes of assigning CERFA categories. However, these modifications have not been used for the assessment of study areas at MOTBY because the State of New Jersey considers petroleum a hazardous substance, and thus elimination of petroleum products from the categorization scheme would be inappropriate for characterization of property that will be subject to New Jersey cleanup requirements and be transferred subject to New Jersey property transfer requirements.

A further refinement has been made in the CERFA categorization scheme for clarification purposes only. In accordance with guidance provided by USAEC, categories 1 and 2 have been further delineated to assist in notification procedures required by CERFA. The CERFA Categorization Scheme used in this EBS is presented in Table 5-1.

Several factors concerning MOTBY make a site-specific categorization of real property problematic due to a potential for underlying facility-wide contamination from several sources. MOTBY is located in New York Harbor, an area known to suffer extensive pollution and the facility has been built on a man-made peninsula, developed out of hydraulic fill from potentially contaminated sediment from the harbor. MOTBY is also located adjacent

to Constable Hook, an area that has seen intensive oil and chemical refining over the last 120 years. MOTBY also possesses an extensive storm and sanitary sewer and drain system that is a potential pathway for migration of contaminants from intentional and unintentional discharges during 57 years of operation. These items raise five areas of specific environmental concern that are not presently characterized:

1. HYDRAULIC FILL: Dredged material from New York Harbor was used to develop the peninsula and it is unknown what contamination can be associated with the fill material, or where at MOTBY contamination hotspots may be found.

2. MIGRATION OF CONTAMINATION FROM OFF SITE VIA AIR PATHWAY: Contamination originating from off-site sources is presently uncharacterized.

3. CONSTABLE HOOK PREVIOUS CONTAMINATION: A pool of petroleum product is known to underlie the adjacent Constable Hook. It is not known what repercussions this has for MOTBY.

4. GENERALIZED POLLUTION OF NEW YORK HARBOR: New York Harbor water and sediments have been impacted by historical and ongoing industrial activity. The impact of contaminant migration from New York Harbor on the MOTBY peninsula has not been characterized.

5. SANITARY AND SEWER DRAINAGE: The facility has an extensive drainage network that needs to be evaluated as a possible conduit and source for contaminants. There are numerous unknowns associated with the types of materials poured into drains.

These five facility-wide concerns have <u>not</u> been included as factors evaluated for CERFA characterization. Were they to be included, the entire base, including the tidal lands, would be categorized as a CERFA category 7 property, due to the uncharacterized nature of these five concerns. It is recommended that these concerns be addressed separately on a facility-wide basis for characterization.

Despite the EBS effort to collect as much information as possible about potential environmental concerns at MOTBY, it is inevitable that some information about concerns identified in the EBS is lacking. Thus, for categorization purposes, conservative assumptions, i.e., assuming items to be an environmental concern unless clearly indicated otherwise, have been made. The following assumptions were used in the preliminary categorization effort:

- CATEGORIZATION IS BY STUDY AREA: Categorization for the EBS was assigned on a study area basis, unless a clear delineation between sub-areas within a study area appears warranted (for exam-

ple a contained spill of material that does not migrate easily in one section of a large study area may be defined as a distinct sub-area).

- INTERIM CATEGORIZATION FOR FACILITIES AND ENVIRONMENTAL CONCERN ITEMS: Individual environmental concerns and specific facilities were assigned an interim categorization to allow for an overall evaluation of a study area. These interim categorizations only consider the specific facility use or environmental concern and not other collocated or nearby concerns or activities, or migration from adjacent areas.

- CATEGORIZATION DEFAULTS: Study area categorizations default to the more restrictive (i.e., higher) category. For example, if there are several items in a study area, ranging in interim categorization from 1 through 6, the study area would be classified as a 6 to be conservative. The only exception to the above is when there is an item classified as 5 included in the study area. Category 5 assumes that some investigation or remedial work has been conducted previously or is ongoing, and if this is true for any part of an area, it is deemed true for the whole area.

- STORAGE ASSUMPTIONS: Unknown storage quantities are assumed to be greater than reportable quantities (or 600 gallons for petroleum products). Unknown storage durations are assumed to be greater than 1 year. Tank petroleum product storage is assumed to occur for a duration more than 1 year.

- RELEASE ASSUMPTIONS: Confirmed spills that have been cleaned up, but for which no confirmatory sampling data could be found, are classified as Category 5. Unknown release quantities of hazardous substances are assumed to be over reportable quantities. There is no threshold of concern for identification of petroleum releases, in accordance with New Jersey reporting guidance.

- REMEDIATION ASSUMPTIONS: Media removal and/or site investigation equates to remediation underway. Source removal (i.e., drums, tanks) does not equate to remediation underway.

- MEDICAL WASTE ASSUMPTIONS: Quantities of medical/infectious wastes at base dispensaries are assumed to vary widely and be stored for less than a year. Thus all medical waste storage areas are assumed to be Category 2A.

- RADIOACTIVE MATERIALS ASSUMPTIONS: All radioactive material storage areas are assumed to be Category 2B, pending further information on quantity and duration of storage.

Finally, the assumptions made in the draft EBS should be considered preliminary and the CERFA Categorization map should be considered a living document that can be updated as

new information is made available, investigations are conducted, and remedial actions performed.

6 Categorization Results

The preliminary categorization effort indicates a range of environmental conditions at MOTBY. The results do not indicate a clear pattern applicable to large areas of the facility, although in general the results do reflect the heavier use of the central and eastern portions of the facility for activities with associated environmental concerns. However, several areas on the western portion of the facility also have significant (CERFA 5 and 6) identified environmental concerns. Figure 6-1 presents a map of MOTBY which indicates the preliminary CERFA categories assigned to each Study Area. Table 6-1 provides a list of areas with specific CERFA category property.

Table 6-2 provides a summary of each study area which lists the present facilities, the size of the study area in acres, the CERFA categorization for the study area, and the rationalization for the assigned category.

The property parcels (study areas) from the draft EBS have not been altered since the initial designation of study areas in order to maintain continuity of information and geographic referencing of environmental concern items. During the review process, it may be beneficial to reparcelize the facility based on any further information developed and on the categorization of property and regulatory approval of the categorization.

7 Data Gaps

EBS guidance advocates that all available federal, state, and local records be reviewed during the preparation of an EBS. While an effort has been made to review all relevant records relating to the base, the following files have not been reviewed to date because they either are not available or were not received in time for inclusion in the draft EBS:

- New Jersey Department of Environmental Protection Spill Reports for the City of Bayonne, including MOTBY from 1986 to 1996.
- Records from the former DRMO operation at MOTBY that are not in the possession of the Base Department of Engineering and Housing that might be in the possession of the Defense Logistics Agency (DLA).
- Files from the North Jersey Field Office of the NJDEP that have not been copied to the Central Files held by NJDEP in Trenton.

- Manifest files for specific command activities and operations at MOTBY.

In addition to site-specific data gaps reported in Appendices C through H of the EBS, several base-wide data gaps have been identified to date. These include the following:

- Reports for many of the previous removal or remediation projects;
- Characterization of the potential for migration of contamination from historical activities at Constable Hook to affect MOTBY;
- Characterization of the hydraulic fill used to construct the port terminal in the 1930s and the potential for air deposition of contaminants from off-site sources;
- Specific sources of all material used to fill the MOTBY peninsula over the last 57 years;
- Characterization of the sanitary sewer and storm sewer pathways concerning past discharge and disposal practices that may have been widespread at times;
- Characterization of sediments in tidal lands owned by MOTBY;
- Base-wide facility survey of all buildings and areas, inside and outside, regardless of whether an environmental concern has been previously identified;
- Base-wide assessments for radon and lead-based paint; and
- Updated information concerning the exact status of asbestos removal by facility.

Data gap analysis is an iterative activity and should continue throughout the BRAC process. Some data gaps may be closed by further document research, while others may be closed by an on-site survey. Some data gaps may require site specific or facility-wide field investigation including environmental sampling and analysis. In addition, there is always the possibility that the nature of some of these identified data gaps could prove difficult to close, given the unknowns inherent in 57 years of operations at what was once the world's largest military ocean terminal.

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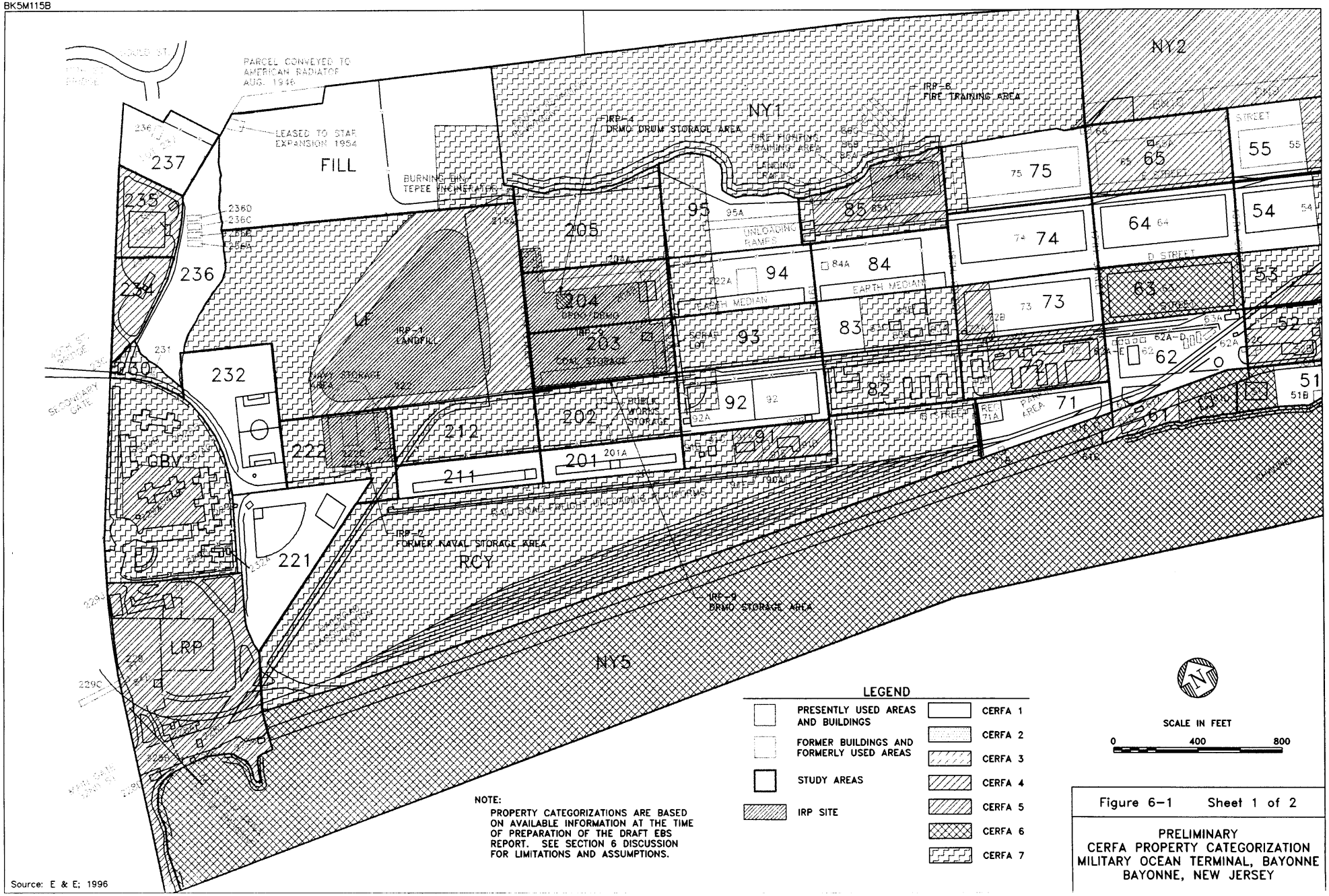

NOTE:
PROPERTY CATEGORIZATIONS ARE BASED ON AVAILABLE INFORMATION AT THE TIME OF PREPARATION OF THE DRAFT EBS REPORT. SEE SECTION 6 DISCUSSION FOR LIMITATIONS AND ASSUMPTIONS.

Source: E & E; 1996

Figure 6-1 Sheet 1 of 2

PRELIMINARY
CERFA PROPERTY CATEGORIZATION
MILITARY OCEAN TERMINAL, BAYONNE
BAYONNE, NEW JERSEY

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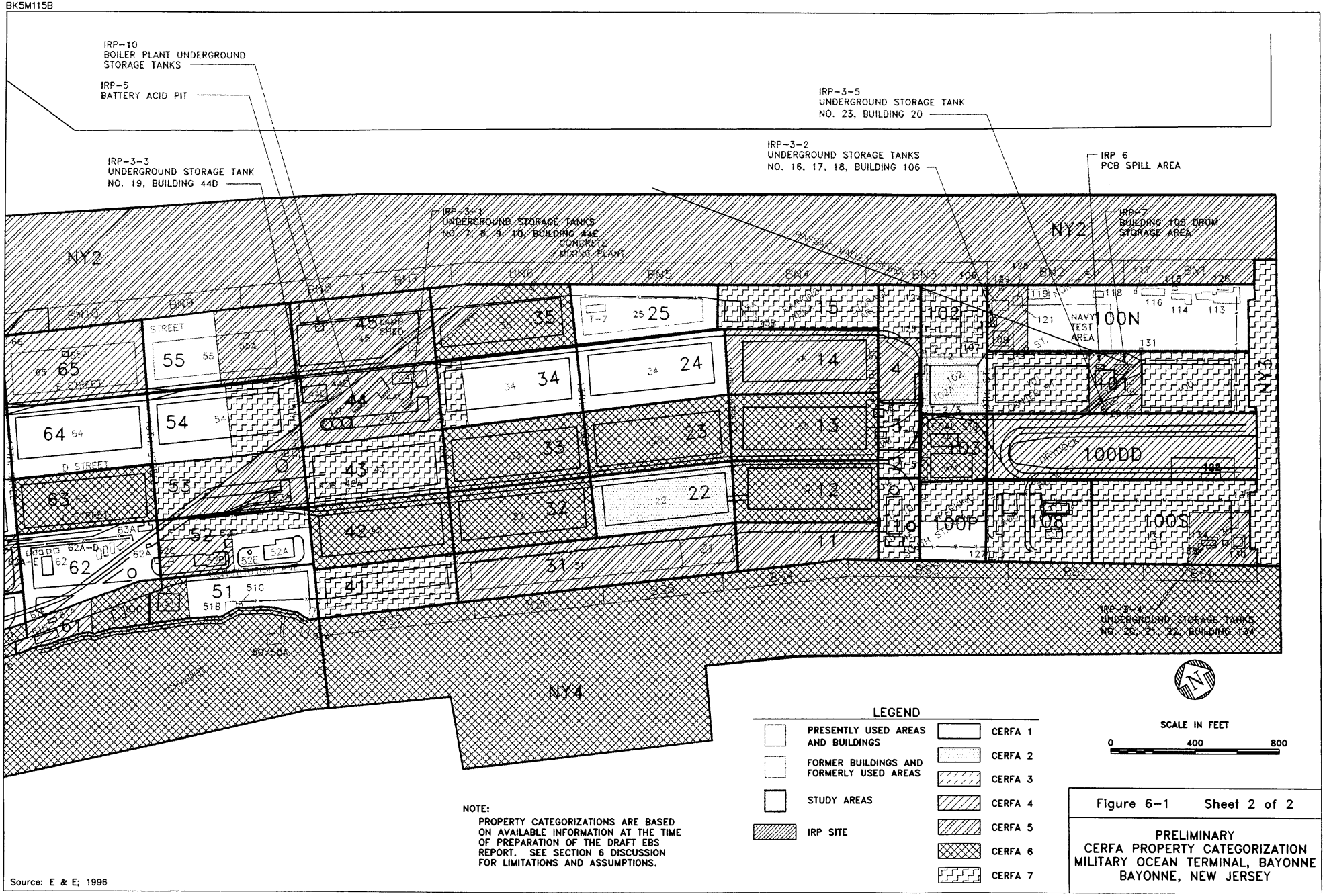

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Source: E & E; 1996

Figure 6-1 Sheet 2 of 2

PRELIMINARY
CERFA PROPERTY CATEGORIZATION
MILITARY OCEAN TERMINAL, BAYONNE
BAYONNE, NEW JERSEY

Table 5-1

CERFA CATEGORIZATION SCHEME

CERFA Category	Environmental Condition of Property	CERCLA Notification Requirements
1	A: Areas where no storage, release, or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas). These areas are designated 1A in the text, but mapped as Category 1.	No notification required; can be identified under CERCLA 120(h)(4) as "CERFA-uncontaminated"
	B: Areas where no evidence exists for the release or disposal of hazardous substances or petroleum products, or migration from adjacent areas. The parcel, however has historically been used to store less than reportable quantities of hazardous substances (as defined in 40 CFR 302.4), or 600 or fewer gallons of petroleum products. These areas are designated 1B in the text, but mapped as Category 1.	No notification required.
2	A: Areas where only storage of more than reportable quantities of hazardous substances or 600 gallons of petroleum products has occurred, but storage has occurred for less than 1 year (no release, disposal, or migration from adjacent areas). These areas are designated as 2A in the text but are mapped as Category 2.	No notification required.
	B: Areas where only storage of more than reportable quantities of hazardous substances or more than 600 gallons of petroleum products has occurred, and storage has occurred for more than 1 year (no release, disposal or migration from adjacent areas). These areas are designated as 2B in the text, but mapped as Category 2.	Notification of storage, release, or disposal as prescribed in CERCLA 120(h) (1) for contracts for sale and (3) for deeds.
3	Areas where storage, release, disposal, and/or migration of hazardous substances of petroleum products has occurred, but at concentrations that do not require a removal or remedial action.	
4	Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred and all remedial actions necessary to protect human health and the environment have been taken.	
5	Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred and removal, and/or remedial actions, are underway, but all required remedial actions have not yet been taken.	Not eligible for transfer by deed.
6	Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, but required response actions have not yet been implemented.	
7	Areas that are unevaluated or require additional evaluation.	

Table 6-1

STUDY AREAS WITH CERFA CATEGORY PROPERTY

CERFA Category	Study Areas with Property in Category
1A	All of 24, 25, 62, 64, 71, 74, 75, 84, 201, 211, 221, 232, 236, and 237 Portions of 34, 51, 52, 54, 55, 73, 75, 83, 92, 94, 95 and FILL
1B	211
2A	Portion of 102
2B	All of 22
3	None
4	All of 65, 100DD, 234, and 235 Portions of 52, 61, and 72
5	All of 11, 14, 31, 44, 45 203, 204, and LRP Portions of 4, 35, 53, 55, 73, 85, 91, 100N, 101, 100S, 222, LF, and GBV
6	All of 12, 13, 23, 32, 33, 63, 103, NY4, and NY5 Portions of 35 and 61
7	All of 1, 2, 3, 15, 41, 43, 82, 93, 108, 202, 205, 212, 230, RCY, NY1, and NY3 Portions of 4, 34, 52, 53, 54, 72, 75, 83, 85, 91, 92, 94, 95, 100N, 101, 102, 100S, 100P, 222, GBV, and FILL

Table 6-2

CATEGORIZATION OF STUDY AREAS

Study Area	Area (acres)	Present Facilities within Study Area	Category	Category Rationalization
1	1.79	1B, 1C, 1D, 1E, 1F, 1G	7	This area was assigned category 7 because of a history of discharges and disposal directly to the sanitary sewer from a variety of sources such as the photolabs. This disposal could have impacted the sewage treatment plant facilities. More information is needed to further characterize the area.
2	0.62	None	7	This area was assigned category 7 because of the possibility of migration from adjacent sites. The area is adjacent to Study Areas 103, 12, and 13 which were assigned category 6.
3	1.05	1A, 106	7	This area was assigned category 7 because of a history of disposal to the sanitary sewer which may have impacted the sump pump and because of the possibility of migration from Study Areas 103, 12, and 13.
4	2.65	None	5, 7	This area was assigned category 5 around former Building 4 because of available information on uncontrolled former storage practices. Even though the waste and building have been removed, no confirmatory sampling data has been located. The north bulkhead area was assigned category 7 because of the unknown potential for contamination from a former preservation tank and sandblasting residue found on the ground.
11	3.11	None	5	This area was assigned category 5 because Building 11 was formerly a pesticide storage building. Although the building has been removed and the lot has been covered with asphalt, no confirmatory sampling data exists.
12	4.68	12	6	This area was assigned category 6 because of uncontrolled storage of drums in the alcove between Buildings 12 and 22. The drums have been removed but the area has not been characterized. Former pesticide storage in this area has also not been characterized.
13	5.22	13	6	This area was assigned category 6 because of former drum storage on the south side of the building. The drums have been removed, but the area has not been characterized. The possibility for contaminant migration from adjacent areas caused the entire area to be categorized equally.

Table 6-2

CATEGORIZATION OF STUDY AREAS

Study Area	Area (acres)	Present Facilities within Study Area	Category	Category Rationalization
14	5.16	14	5	This area was assigned category 5 due to the former large-scale storage of hazardous waste in the late 1980s. Although the building inside area has been remediated and the building fully renovated, no subsurface confirmatory sampling data was located and subsurface sampling may not have been conducted.
15	3.7	15	7	This area was assigned category 7 because of concerns regarding former petroleum storage on the west side, near Buildings 15A and 15B. The only concern for the east side is the potential for migration from adjacent areas.
22	4.58	22, 22A	2B	This area was assigned category 2B because of hazardous material and waste storage at the Federal Archive Center Microfilm Laboratory and a 1,000 gallon diesel AST.
23	4.98	23	6	This area was assigned category 6 because of the need for environmental characterization due to the extensive use of the building over the past 54 years.
24	5.22	24	1A	This area was assigned category 1A because no environmental concerns were identified, and because the possibility of migration as a result of environmental concerns at adjacent areas is considered low.
25	3.99	25	1A	This area was assigned category 1A because no environmental concerns were identified and the possibility of migration as a result of environmental concerns from adjacent areas is considered low.
31	7.24	None	5	This area was assigned category 5 because environmental sampling was not performed after the building was demolished. The concerns are former pesticide storage in the building, and the historic storage of explosives in 1939-1941.
32	4.65	32	6	This area was assigned category 6 because it has not been characterized. There is a history of uncontrolled drum storage, and there was a rust removal/preservation room in the building.
33	4.78	33	6	This area was assigned category 6 because the area has an 8-year history of paint and oil storage and has not been characterized.

Table 6-2

CATEGORIZATION OF STUDY AREAS

Study Area	Area (acres)	Present Facilities within Study Area	Category	Category Rationalization
34	5.04	34	1A, 7	This area was assigned category 7 on the west side because of a concern regarding possible migration from Study Area 44. The rest of the study area qualified as category 1A because no environmental concerns were identified.
35	5.03	35	5,6	Most of this area was assigned category 6 because of a history of uncharacterized hazardous material, hazardous waste, and petroleum storage and releases. However, the northwestern edge was assigned category 5 because of concerns regarding the fuel pipeline associated with Study Area 44 that have been partially remediated.
41	3.59	41	7	This area was assigned category 7 because no removal or confirmatory sampling was found concerning identified hazardous material storage.
42	4.6	42, 42B	6	This area was assigned category 6 because of the overall combination of categories assigned to the individual floors of the building. Floor-by-floor: 42-1 was assigned category 3; 42-2, 42-3, and 42-4 were assigned category 2B; 42-5 and 42-6 were assigned category 6 (driving overall building categorization); and 42-7 was assigned category 1A. For explanation of individual floor categorizations, refer to the facility descriptions.
43	4.55	43	7	This area was assigned category 7 because of a battery spill at an unknown location somewhere in the building. The spill was cleaned up, but no confirmatory data could be found. There is also a concern over migration from adjacent areas, particularly Study Area 44.
44	5.14	44A, 44B, 44C, 44D, 44F	5	This area was assigned category 5 because of the extensive history of petroleum storage and releases that have been documented as impacting most of the area. Remedial activity has been conducted and is underway in regards to some of the identified concerns.
45	5.46	45	5	This area was assigned category 5 because of storage and disposal activities that have historically occurred here, some of which have been remediated. There is also a capped acid pit which, while it is the subject of an RI investigation (RI site 5), has not yet been fully investigated.

Table 6-2

CATEGORIZATION OF STUDY AREAS

Study Area	Area (acres)	Present Facilities within Study Area	Category	Category Rationalization
51	3.64	51	1A, 6	This area was assigned category 6 on the western side because of a history of petroleum storage and releases. The remainder of the area was assigned 1A because no environmental problems could be identified.
52	3.63	52A, 52B, 52D, 52E	1A, 4, 7	This area was assigned category 7 along the northern edge because of contaminant migration associated with Study Area 53. The southwestern side was assigned category 4 because of a removed tank at 52B. The southeastern portion of the site around 52A was assigned category 1A because no environmental concerns were identified.
53	4.55	53, 53A, 53B	5, 7	The eastern portion of this area was assigned category 5 because investigations have indicated that further contamination is possible, but some removals have occurred. The western half of the study area was assigned category 7 because of the potential for contaminant migration from Study Area 63.
54	5.7	54	1A, 7	This area was assigned category 7 on the eastern side because of a migration concern from Study Area 44. No environmental concerns were identified for the western half which was assigned category 1A.
55	5.79	None	1A, 5	This area was assigned category 5 on the eastern half because of a large PCB spill which was cleaned up, but for which no subsequent confirmatory sampling data could be found. No environmental concerns were identified for the western half which was assigned category 1A.
61	2.38	61B, 61C, 61D, 61E	4, 6	This area was assigned category 6 on the eastern half because environmental information needs to be collected for the substation. The western half was assigned category 4 because of an UST that has been removed.
62	5.23	62	1A	This area was assigned category 1A because no environmental concerns were identified for the area and the likelihood of migration from adjoining study areas is low.
63	4.09	63	6	This area was assigned category 6 because it is a former storage area but the area has not been characterized.

Table 6-2

CATEGORIZATION OF STUDY AREAS

Study Area	Area (acres)	Present Facilities within Study Area	Category	Category Rationalization
64	5.29	64	1A	This area was assigned category 1A because no environmental concerns could be identified and because the potential for migration from adjoining sites is considered low.
65	5.4	None	4	This area was assigned category 4 because of remediated petroleum releases.
71	3.16	71A	1A	This area was assigned category 1A because no environmental concerns could be identified and because the potential for migration from adjoining sites is considered low.
72	4.43	72, 72A, 72B, 72C	4, 7	This area was assigned category 4 around Building 72 because of a removed UST. The western end of the area was assigned category 7 because of uncharacterized hazardous material storage at Building 72A.
73	4.25	73, 73A	1A, 5	The western part of this area was assigned category 5 because of the former storage of de-icing material in the western part of the area. No media testing has been located, although the drums have been removed, and the area was apparently the subject of an investigation. The remainder of the area qualifies for category 1A because no environmental concerns could be identified and because the potential for migration from adjoining sites is considered low.
74	5.49	74	1A	This area was assigned category 1A because no environmental concerns could be identified and because the potential for migration from adjoining sites is considered low.
75	5.34	75	1A, 7	Most of this area was assigned category 1A because no environmental concerns could be identified and because the potential for migration from adjoining sites is considered low. The exception is the western portion, which was assigned category 7 because of the possibility for contaminant migration from Study Area 85.
82	4.23	82	7	This area was assigned category 7 because of an unknown storage tank identified for the study area. If details for the tank could be identified, the study area would likely qualify for category 2B.

Table 6-2

CATEGORIZATION OF STUDY AREAS

Study Area	Area (acres)	Present Facilities within Study Area	Category	Category Rationalization
83	3.97	83, 83A, 83B, 83C, 83D	1A, 7	This area was assigned category 7 in the eastern half because of concerns regarding ASTs and other historic general fueling concerns. The western part of the area qualified for category 1A because no environmental concerns could be identified and the potential of migration from adjoining areas is considered low.
84	4.26	84	1A	This area was assigned category 1A because no environmental concerns could be identified and because the potential for migration from adjoining sites is considered low.
85	4.89	85	5, 7	The former fire fighting area was assigned category 5 because of the ongoing RI at this study area. The remainder of the study area was identified as category 7 due to migration concerns from the former fire fighting area, or the possibility that fire fighting activities may have occurred in a larger area.
RCY	41.39	Railroad Classification Yard, 201	7	This area was assigned category 7 because little information was located on historic activities, housekeeping, or other problems in the railroad classification yard and along the unloading platforms.
91	2.62	91A, 91B, 91C, 91D, 91E	5, 7	The eastern part of this area around the gas station was assigned category 5 because of the extensive contamination that was found during investigation and removal of the former underground storage tanks and the possibility for further contamination. The western part of the area was assigned category 7 because no information was located concerning the former paint storage building.
92	4.87	92, 92A, 92B, 92C	1A, 7	Most of this area was assigned category 1A because no environmental concerns could be identified and because the potential for migration from adjoining sites is considered low. The northwest corner of this area was assigned category 7 due a concern over migration from the former DRMO yard in 203 and 204.
93	4.22	93	7	This area was assigned category 7 because of the possibility of historic use by DPDO and the potential for migration from the former DRMO yard in 203 and 204.

Table 6-2

CATEGORIZATION OF STUDY AREAS

Study Area	Area (acres)	Present Facilities within Study Area	Category	Category Rationalization
94	4.47	94	1A, 7	Most of this area was assigned category 1A because no environmental concerns could be identified and because the potential for migration from adjoining sites is considered low. However, the western third of this area was assigned category 7 due to the potential for migration from the former DRMO yard in 203 and 204.
95	5.29	95	1A, 7	Most of this area was assigned category 1A because no environmental concerns could be identified and because the potential for migration from adjoining sites is considered low. However, the western third of this area was assigned category 7 due to the potential for migration from the former DRMO yard in 203 and 204.
101	8.55	100, 101, 105	5, 7	The Building 100 and 101 areas were assigned category 7 because of the numerous unknowns associated with historic activities at the various buildings. The area around Building 105 was assigned Category 5 in light of the ongoing remedial work at the site.
100N	9.13	None	5, 7	This area was assigned category 5 along the very western edge because of USTs associated with B106, which are the subject of ongoing remedial effort. The rest of the study area was assigned category 7 because of unknown environmental implications associated with the Navy Test Area and Building 113.
102	4.48	102, 102A	2A, 7	Building 102 was assigned category 2A because of the potential for medical waste storage, and the northern portion of this area was assigned category 7 due to migration concerns from adjoining areas 4 and 100N.
103	2.33	103, 104	6	This area was assigned category 6 because of former uncontrolled indoor and outdoor storage and the lack of environmental investigation information for the study area.
108	4.5	108, 110, 111	7	This area was assigned category 7 because of former, uninvestigated, hazardous material storage at an unknown location near B108; a history of paint and oil storage at B110; current hazardous waste storage at B111, and concerns about the integrity of B111.

Table 6-2

CATEGORIZATION OF STUDY AREAS

Study Area	Area (acres)	Present Facilities within Study Area	Category	Category Rationalization
100DD	9.36	122, 132	4	This area was assigned category 4 because the sludge storage at 122 has been cleaned out and the sediment in the dry dock has been removed and flushed from the area. Note: flushing of the dry dock is the reason Study Area NY3 was assigned category 7 due to the potential for residual contaminated sediment outside the caisson.
100S	7.08	136	5, 7	This area was assigned category 5 along the eastern edge because while an investigation of the area has been conducted, further work is likely to be needed around the B130 and B134 tanks. The western edge is considered a 7, because of the potential for migration from either the tanks or Study Area 108.
100P	2.77	None	1A, 7	This area was assigned category 7 along the northern edge because a concern exists about possible migration from 103. The southern portion has no environmental concerns, and was assigned category 1A.
201	2.46	201A	1A	This area was assigned category 1A because no environmental concerns could be identified and because the potential for migration from adjoining sites is considered low.
202	4.6	202	7	This area was assigned category 7 because of migration concerns from DRMO (Lots 203, 204) - or RI site 9.
203	4.25	203, 222A	5	This area was assigned category 5 because it is the subject of ongoing remedial effort as part of RI site 9.
204	4.59	204, 204A, 204B	5	This area was assigned category 5 because it is the subject of ongoing remedial effort as part of RI sites 4 and 9.
205	6.25	205	7	This area was assigned category 7 because of the potential for migration from the landfill and Study Areas 203 and 204. There are also uncharacterized concerns associated with former burning trenches, a burning bin and the tepee incinerator.
211	2.48	211A	1B	This area was assigned category 1B because the only environmental concern identified was a 275 gallon aboveground storage tank for fuel oil that is located within an enclosure, and because the potential for migration from adjoining sites is considered low

Table 6-2

CATEGORIZATION OF STUDY AREAS

Study Area	Area (acres)	Present Facilities within Study Area	Category	Category Rationalization
212	4.41	212	7	This area was assigned category 7 because of migration concerns from RI site 2 (lot 222); RI site 1 (landfill); and RI sites 4 and 9 (DRMO lots 203 and 204).
LF	29.22	LF	5, 7	The identified landfill area was assigned category 5 because of the ongoing remedial effort of this site as RI site 1. A part of the area was assigned category 7 because of the unknown potential for migration of contamination from the fill and the possibility that the fill area is not fully delineated.
221	6.27	221, 221A, 221B, 221C	1A	This area was assigned category 1A because no environmental concerns could be identified and because the potential for migration from adjoining sites is considered low.
222	4.32	None	5, 7	The identified former navy storage area was assigned category 5 because of the ongoing remedial effort at the site as RI site 2. The remainder of the area was assigned a 7 because of a potential for migration from the storage area or the landfill.
LRP	14.2	Main Gate Area, 84A, 228A-F, 229H, 229J	5	This area was assigned category 5 because investigations associated with tank removals and the NJ Transit proposal both have indicated the possibility for extensive groundwater and soil contamination. Some remedial efforts have been conducted.
GBV	11.75	251AC, 252AB, 253AB, 254AB, 229A-B, 229E-F	5, 7	The area around 254AB was assigned category 5 because of a history of releases and contamination concerns related to the removed USTs, some of which have been remediated. All other areas were assigned category 7 because of the possibility for contaminant migration from adjoining areas and off-site property.
230	0.79	None	7	This area was assigned category 7 because of a report of contaminated backfill used in the vicinity of the 40th St. Gate.
232	5.67	232, 232A	1A	This area was assigned category 1A because no environmental concerns could be identified and because the potential for migration from adjoining sites is considered low.
234	2.03	234A	4	This area was assigned category 4 because of a removed UST that was fully remediated.
235	2.56	235A, 235B, 235C	4	This area was assigned category 4 because of a removed UST at Building 235A that was fully remediated.

Table 6-2

CATEGORIZATION OF STUDY AREAS

Study Area	Area (acres)	Present Facilities within Study Area	Category	Category Rationalization
236	4.85	None	1A	This area was assigned category 1A because the only environmental concern identified was a septic tank and line used for domestic sewage from the residence at 234A and the former trailers (236A-D) and because the potential for migration from adjoining sites is considered low.
237	2.98	NYCOE Trailers	1A	This area was assigned category 1A because no environmental concerns could be identified and because the potential for migration from adjoining sites is considered low.
FILL	18.9	None	1A, 7	Most of this area was assigned category 1A, except for the southeast corner, because no environmental concerns could be identified. The southeastern corner was assigned category 7 because of its proximity to burning trenches, the burning bin, and the tepee incinerator, and migration concerns from the landfill.
NY1	41.74	86A - C, North Shoreline	7	This area was assigned category 7 because of migration concerns from the Former Fire Training Area (RI site 8), the burning trenches, the landfill (RI site 1), and DRMO (RI sites 4, 9).
NY2	64.46	North Berths	5	This area was assigned category 5 because of numerous spills for which spill containment and remediation activities occurred, but for which complete characterization of residual contamination has not been conducted..
NY3	4.12	East Berths	7	This area was assigned category 7 because dry dock sediments potentially containing unknown contaminants were flushed, accidentally and intentionally, into this area. No characterization of this area for this concern has been conducted.
NY4	55.75	South Berths	6	This area was assigned category 6 because at least one spill was recorded at the south berths. Other spills are likely over the 57 years of use. There is also a concern of contamination as a result of spills at Constable Hook.
NY5	84.68	South Shoreline	6	This area was assigned category 6 because of the potential for contaminant migration from the Bayonne Landfill and the potential residual impact of recorded spills at Constable Hook.

Note: The total acreage included in these study areas is 677.94 acres, based on EBS mapping. This information has not yet been reconciled with the acreage in the deed descriptions.